

REMARKS

This is intended as a full and complete response to the Office Action dated September 16, 2009, having statutory period for response set to expire on December 16, 2009. Please reconsider the claims pending in the application for reasons discussed below.

Claims 1, 3, 6, 8-9, and 11 are pending in the application. Claims 1, 3, 6, 8-9, and 11 remain pending following entry of this response.

Claim Rejections - 35 U.S.C. § 103

Claims 1, 3, 6, and 8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Chan et al.* (U.S. Patent No. 6,194,120, hereinafter, "*Chan*") in view of *Jorgenson et al.* (U.S. Patent No. 5,647,030, hereinafter, "*Jorgenson*") and in view of *Ronnekleiv et al.* (U.S. Publication 2002/0041724, hereinafter, "*Ronnekleiv*"). Applicants respectfully traverse this rejection.

The Examiner bears the initial burden of establishing a prima facie case of obviousness. See MPEP § 2141. Establishing a prima facie case of obviousness begins with first resolving the factual inquiries of *Graham v. John Deere Co.*, 383 U.S. 1 (1966). The factual inquiries are as follows:

- (A) determining the scope and content of the prior art;
- (B) ascertaining the differences between the claimed invention and the prior art;
- (C) resolving the level of ordinary skill in the art; and
- (D) considering any objective indicia of nonobviousness.

Once the *Graham* factual inquiries are resolved, the Examiner must determine whether the claimed invention would have been obvious to one of ordinary skill in the art.

Respectfully, Applicants submit that the Examiner has not properly characterized the teachings of the references and/or the claims at issue. Accordingly, a prima facie case of obviousness has not been established.

For example, the Examiner relies on *Ronnekleiv* as teaching “birefringence of an optical waveguide changing in response to a measurand” (page 3 of the current Office Action). However, *Chan* in view of *Jorgenson* and in view of *Ronnekleiv* does not teach, show, or suggest “a property of the *D-shaped portion* changes in response to the measurand, the property being polarization or birefringence” as recited in independent claim 1 (emphasis added). The Examiner concedes that *Chan* “does not teach that a polarization or a birefringence of the optical waveguide changes in response to the measurand,” the optical waveguide being D-shaped or otherwise (page 3 of the current Office Action). *Jorgenson* is silent with respect to polarization or birefringence and, therefore, fails to overcome the deficiencies in *Chan*.

Despite the Examiner’s contentions, *Ronnekleiv* is also silent with respect to a property of a *D-shaped portion* changing in response to a measurand as required in independent claim 1 and, therefore, fails to overcome the deficiencies in *Chan* in view of *Jorgenson*. Applicants respectfully submit that the Examiner overlooks a limitation and, thus, ignores the scope of independent claim 1 wherein a property of the *D-shaped portion* changes in response to the measurand. The Examiner’s attention is directed to the present application where, for example, the D-shaped portion 10 of a sensor 200 has a flat surface 100 and a rounded outer surface (paragraph [0015] lines 1-2 and FIG. 1). “In response to the axial strain 201 or the cross axis strain 202, the [D-shaped] sensor 200 creates or changes the polarization or the birefringence of the light 15 passing through the sensor 200 to provide an optical signal indicative of the strain on the sensor 200” in this example (paragraph [0017] lines 1-6 and FIG. 2).

Therefore, *Ronnekleiv* fails to overcome the deficiencies in *Chan* in view of *Jorgenson*. Claim 8 recites similar limitations to claim 1.

For this reason, Applicants respectfully submit that the Examiner has failed to establish a prima facie case of obviousness. Accordingly, Applicants submit claims 1 and 8, as well as claims 3 and 6 dependent therefrom, are allowable and respectfully request withdrawal of this rejection.

Claim 9 is rejected under 35 U.S.C. § 103(a) as being unpatentable over *Chan* in view of *Jorgenson* and in view of *Ronnekleiv* and further in view of *Bergh* (U.S. Patent No. 4,386,822). Applicants respectfully traverse this rejection.

Claim 9 depends from independent claim 8, which Applicants submit is allowable for reasons discussed above. *Bergh* fails to overcome the deficiencies in *Chan* in view of *Jorgenson* and in view of *Ronnekleiv*. Accordingly, Applicants submit claim 9 is also allowable and respectfully request withdrawal of this rejection.

Claim 11 is rejected under 35 U.S.C. § 103(a) as being unpatentable over *Chan* in view of *Jorgenson* and in view of *Ronnekleiv* and further in view of *Bailey et al.* (U.S. Publication 2002/0197037, hereinafter, "*Bailey*"). Applicants respectfully traverse this rejection.

Claim 11 depends from independent claim 8, which Applicants submit is allowable for reasons discussed above. *Bailey* fails to overcome the deficiencies in *Chan* in view of *Jorgenson* and in view of *Ronnekleiv*. Accordingly, Applicants submit claim 11 is also allowable and respectfully request withdrawal of this rejection.

Therefore, the claims are believed to be allowable, and allowance of the claims is respectfully requested.

Conclusion

Having addressed all issues set out in the office action, Applicants respectfully submit that the claims are in condition for allowance and respectfully request that the claims be allowed.

If the Examiner believes any issues remain that prevent this application from going to issue, the Examiner is strongly encouraged to contact Randol W. Read, Applicants' representative, at (713) 623-4844, to discuss strategies for moving prosecution forward toward allowance.

Dated: December 15, 2009

Respectfully submitted, and
S-signed pursuant to 37 C.F.R. 1.4,

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